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EXAMINER

BOTTS, MICHAEL K

ART UNIT PAPER NUMBER

2176

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/12/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/12/2007.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/812,906	ERICSON, PETTER	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael K. Botts	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This is a Final Office Action on the merits. This action is responsive to the following communication: Amendment Under 37 CFR Section 1.111 [hereinafter "Amendment"], which was filed on October 30, 2006.
2. Claims 1-39 are currently pending in the case, with claims 1, 9, 13, 16, and 23 being the independent claims.
3. Claims 1-39 were rejected under 35 U.S.C. 112, first paragraph, regarding the terms "marks" and "grid points." Applicant has amended the specification and cited to documents incorporated by reference disclosing those terms. Accordingly, the rejection is withdrawn.
4. Claims 11, 12, 15, and 22 were rejected under 35 U.S.C. 112, second paragraph, as comprising improper hybrid claims. Applicant has appropriately amended the claims to obviate the rejection. Accordingly, the rejection is withdrawn.
5. Claims 1-39 were rejected under 35 U.S.C. 112, second paragraph, regarding the phrase "raster points." Applicant has stricken the use of the phrase. Accordingly, the rejection is moot.
6. Claims 11, 12, 15, and 22 were rejected under 35 U.S.C. 101 as comprising improper hybrid claims. Applicant has appropriately amended the claims to obviate the rejection. Accordingly, the rejection is withdrawn.
7. Applicant submitted amended drawings 7a-7d as new drawing. The drawings are objected to.
8. Claims 1-39 are rejected.

### ***Drawings***

9. Applicant submitted amended drawings 7a-7d as new drawing. The drawings are objected to as new matter. Applicant claims the drawings were incorporated by reference in the original specification by virtue of inclusion in Swedish Patent Application No. 0001236-9, which was filed in Sweden April 5, 2000. It is noted that a copy of the claimed priority document, Swedish Patent Application No. 0001236-9, which was filed in Sweden April 5, 2000, is not found to have been filed in this Application. Contrary to prior indications in the Office Action Summary, it is now found that Applicant filed a certified translation of the U.S. Provisional Application, and not the Swedish Application. The Office Action Summary in this Office Action corrects prior errors in this regard.

The Examiner suggests that Applicant file a certified copy of the Swedish priority document in order to establish the correctness of the proposed amended drawings. Until such time as the priority of the drawings is established by the certified priority document, the drawings will be objected to as new matter.

### ***The Specification***

10. Applicant is reminded of the continuing requirement to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification, when appropriate, and the status of all citations of U.S. filed applications in the specification should also be updated, when appropriate.

***General Comments re: Terminology***

Upon review of the claims and specification, and interview with the attorney for the Applicant, the Examiner reads the limitation terms and phrases of the claims as follows, and they will be so read for the remainder of this Office Action:

A "**position-coding pattern** located on the surface and detectable by an optical sensor" is read as a pattern printed or provided on a page such that when perceived by an optical input device, the position on the page may be determined based on the pattern detected. See, disclosure, generally. The "position-coding pattern" is created by the placement of "marks" on the page that are readable by an optical scanner. The "position coding pattern" which is the underlying pattern that, when detected by an optical device, identifies to the processor where on the page the user is marking is not to be confused with the "identity pattern" which merely identifies the form type.

The term "**marks**" is not defined in the specification. It is noted that the term "marks and raster points" was added by an Amendment, filed October 11, 2005, which deleted the limitation wherein "*the position coding pattern utilizes displacements of dots in relation to a raster to code different symbol values*" and replaced it with the following: "*each position is encoded by directions of displacements between a plurality of marks and raster points.*" The Examiner reads the claim limitation "mark" to be the same as a "dot," which was disclosed in the specification.

The phrase **“form layout”** is read by the Examiner as being the printed form on the page that resembles the appearance of a normal form, including text and fields to be filled in by the user. In context of the claimed invention, the **“form layout”** is what a user would see and use as if using a standard form, whereas the processor receives a form identification by the user checking a particular box or scanning a bar code. Upon identifying the form, the processor then knows what type of data is expected to be entered by the user onto the form, and the processor knows where to look on the page to receive that data. See, disclosure, paragraph [009].

An **“entry field”** is read as the area for user input printed on the page in the **“form layout,”** and the **“entry field”** is also read as the area the processor expects to receive data after the **“form layout”** is identified. See, disclosure, paragraph [012].

An **“identity pattern”** **“indicating positions on the surface that may be marked to identify the form layout”** is disclosed as a part of the form that identifies the form type to the processor. Examples of an **“identity pattern”** could include a simple check box indicating the form is a memo, or a phone message, or a fax, etc. An optical sensor in a pen may be used to detect which box is checked and indicate to the processor what areas of the writing surface should be used for input, and where that input should be sent. A disclosed example includes a bar code, which, when crossed by an optical receptor on a pen, will register the form type. If the **“fax”** bar code is swiped, the user

may write a fax in the appropriate section of the page, and have the input transmitted by the processor as a fax. Similarly, if the box checked or bar code swiped indicates a schedule entry, then the user would input data to the appropriate area of the page, and the data would then be directed to the user's schedule. See, disclosure, paragraphs [007]-[011]. The "identity pattern" which merely identifies the form type, is not to be confused with the "position coding pattern" which is the underlying pattern that, when detected by an optical device, identifies to the processor where on the page the user is marking.

A "**raster point**" is disclosed as a "nominal position," which "may be virtual and thus neither visible to the eye nor directly detectable by a device which is to determine positions on the surface." Further: "The nominal positions may be regularly arranged in the position-coding pattern, whereby the virtual raster may be determined indirectly by means of the marks detected by the device." See, Applicant's "Reply to Office Action of June 28, 2006," filed October 30, 2006, page 3. The Examiner reads this element in its broadest reasonable interpretation as encompassing either a visible or invisible (virtual) reference point located on the surface of a physical document.

The phrase "**directions of displacements between a plurality of marks and raster points**" is read in its broadest reasonable interpretation as including a displacement of a dot or other mark in relation to the "raster point" or "nominal position" of the "position-coding pattern." See, Applicant's "Reply to Office Action of June 28,

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2006," filed October 30, 2006, page 17, and see, disclosure, paragraph [024].

***Claims Rejection – 35 U.S.C. 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**11. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger, et al. (U.S. Patent 5,629,499, issued May 13, 1997) [hereinafter "Flickinger"], in view of Sekendur (U.S. Patent 5,477,012, issued December 19, 1995) [hereinafter "Sekendur"].**

Regarding **independent claim 1 as amended**, Flickinger in view of Sekendur teaches:

*A form, comprising:*

*a surface;*

*a position-coding pattern located on the surface and detectable by an optical sensor,*

*wherein each position is encoded by directions of displacements between a plurality of marks and raster points;*

*a form layout on the surface indicating at least one entry field for receipt of information; and*



*an identity pattern on the surface indicating positions on the surface that may be marked to identify the form layout.*

(In a broad reasonable interpretation, the claim reads on a page with a printed underlayment of symbols such that an optical sensor can track the location on the page by reading the underlying symbols, and, printed onto the page is a standard looking form with areas for user input of data. Finally, each form also contains an area to be scanned by the optical sensor such that the processor will know what form is being used so that the processor can manipulate the input appropriately. In other words, the claim reads on a specially printed orientation paper with a form printed on it and an area within the form to identify it to the processor when scanned by an optical sensor. As an example, a form printed on the special paper identified as an e-mail, wherein a certain location of page will receive data treated as an e-mail address, and a different area of the page will receive data treated as the e-mail message. Basically, the claim specifies 1) a page with underlying orientation marks, 2) a form printed on the page, and 3) a form identifier located on the form and readable by an optical sensor.

Flickinger teaches a form printed on a page with a form identifier ("identify pattern") as bar code, on the surface that may be marked (scanned) by an optical sensor to identify the form layout. See, Flickinger, figure 5, element 204, and col. 3, lines 16-67. See also, Flickinger, figure 5, element 206, and col. 4, lines 30-34, teaching checking a box on a form to indicate the identification ("identify pattern") of the form. Flickinger does not expressly teach a position-coding pattern located on the surface and detectable by an optical sensor wherein each position is encoded by

direction of displacements between a plurality of marks and raster points.

Sekendur teaches a coordinate sensor using an optical scanner reading "position-coding pattern" located on the surface and comprising a plurality of dots ("marks") in a raster point pattern. See, Sekendur, figures 1-5, and col. 4, line 12 through col. 5, line 9. Further, Sekendur teaches that the location of the marks is identified by the optical sensor reading the displacement between the marks. See, Sekendur, figures 1-5, and col. 4, lines 28-48.

Flickinger and Sekendur are combinable in that they both involve the art of locating information on a page using discrete points readable by a sensor in order to identify the location of the writing or entry of data by a user.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Flickinger and Sekendur.

The suggestion or motivation for making the combination is that Flickinger teaches locating a point of a user's position on a surface, such as a writing surface, and Sekendur teaches an alternate method for locating that point that is combinable and complimentary to that taught by Flickinger. Removing the coordinate location teaching of Flickinger would leave a system of an optical sensor working with writing on a form, and the electronics would be removed. Combining the teaching of Flickinger with that of Sekendur would result in a system of an optical sensor sensing the position of form entries by the identification of dots on a page. Both Flickinger and Sekendur teach optical identification of the form.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to have combined the teachings of Flickinger and Sekendur to result in the inventions specified in claim 1.

The "raster" is taught in Sekendur as the "center circle 4," which is consistent with the definition of a visible or virtual reference point for the displaced "marks." See, Sekendur, figure 1, and col. 4, lines 30-32. The "marks" are taught in Sekendur as the "slices 7" which are oriented around the "center circle 4" and which, by their displaced position relative to the "center circle 4" indicate the location of the indicator on the page. See, Sekendur, figure 1, and col. 4, lines 28-41.)

Regarding **dependent claim 2**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the identity pattern comprises a bar code.*

(See, Flickinger, col. 3, lines 65-68, teaching the use of a bar code as an "identify pattern.")

Regarding **dependent claim 3**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the identity pattern comprises a bar code that prevents the optical sensor from detecting the position-coding pattern on portions of the surface covered by bars of the bar code but allows the optical sensor to detect the position-coding pattern between the bars of the bar code.*

(It would have been obvious to one of ordinary skill in the art at the time of the invention to print the identify pattern bar code so that it would not detect the underlying position-coding pattern for the obvious and beneficial purpose of making the bar code

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independently readable without incorporating potentially confusing input from images located between the lines of the bar code.

Similarly, it would have been obvious to one of ordinary skill in the art at the time of the invention to make the underlying position-coding pattern readable so that the position of the bar code could be identified to the processor.)

Regarding **dependent claim 4**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the identity pattern also indicates a scale of the form layout.*

(See, Flickinger, col. 3, lines 16-59, teaching that all data relative to the form is incorporated through the form identification (identity pattern). Specifically see, Flickinger, col. 3, lines 45-47, teaching different forms in different scales as an inventory form and a bank check.)

Regarding **dependent claim 5**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the identity pattern comprises a box for receipt of a cross.*

(See, Flickinger, figure 5, element 206, and col. 4, lines 30-34, teaching checking a box on a form to indicate the identification ("identify pattern") of the form. The box for receipt of input is expressly taught, and Flickinger expressly teaches a "check-mark." A "check mark" was known to one of ordinary skill in the art at the time of the invention to be a general term for "a mark placed next to an item to show that it has been noted, verified,

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or approved.” See, The American Heritage College Dictionary, Fourth Edition, Houghton Mifflin, 2002, definition of “check mark.” It would have been obvious to one of ordinary skill in the art at the time of the invention to mark a pattern identity box with a “cross” as a means of indicating that the box was noted or to verify the form type.)

Regarding **dependent claim 6**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the entry field comprises a shape to be marked.*

(See, Flickinger, figure 5, element 206, and col. 4, lines 30-34, teaching checking a box on a form to indicate the identification (“identify pattern”) of the form. A box is a “shape to be marked.”)

Regarding **dependent claim 7**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the entry field comprises a scale that can be marked at a location to indicate a numerical rating.*

(Flickinger in view of Sekendur teaches all the limitations of claim 1. Flickinger in view of Sekendur does not expressly teach the entry of data onto a form wherein the entry field comprises a scale that can be marked at a location to indicate a numerical rating.

The differences between claim 7 and claim 1 are only found in the non-functional descriptive material and are not functionally involved in the steps recited. The steps of marking of a form entry field with an optical sensor sensing the location of the mark and transferring that data to a processor would be the same whether the user was entering

an indication of a line on a scale, an indication of a selection of a check box, of the entry of data in a text field. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability. See, *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a data field on a form where a user could mark to indicate a response on a scale.)

Regarding **dependent claim 8**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the entry field comprises space for receiving handwritten information.*

(See, Flicking, col. 4, lines 13-15, teaching that the user of the invention "just fills out the form or takes notes on a piece of paper with the board as a support, as one normally does in writing." See also, Sekendur, Abstract, teaching that the invention "might be used for determining the position of a pen/pencil on paper for handwriting data input." )

Regarding **independent claim 9 as amended**, Flickinger in view of Sekendur teaches:

*A method for generating a form, comprising:  
printing on a surface a position-coding pattern detectable by an optical sensor,*

*wherein the position coding pattern utilizes directions of displacements*

*between a plurality of marks and raster points to code different symbol values;  
printing on the surface a form layout indicating at least one entry field for  
receipt of information; and  
printing on the surface an identity pattern indicating positions on the  
surface whose arrangement identifies the form layout.*

(Claim 9 incorporates substantially similar subject matter as claimed in claim 1 and is rejected along the same rationale.)

Regarding **dependent claim 10**, Flickinger in view of Sekendur teaches:

*The method of claim 9, wherein printing on the surface the form layout  
comprises printing the form layout at a known location relative to the position-  
coding pattern.*

(See, Flickinger, col. 4, lines 30-34, teaching to locate form identification check boxes (form layout) at different known positions to identify different forms.)

Regarding **dependent claim 11 as amended**, Flickinger in view of Sekendur teaches:

*A printer for generating a form, comprising:  
memory; and  
a processor configured to  
print, on a surface, a position-coding pattern detectable by an  
optical sensor, wherein the position coding pattern utilizes directions of  
displacements between a plurality of marks and raster point to code*

*different symbol values;*

*print, on the surface, a form layout indicating at least one entry field  
for receipt of information; and*

*print, on the surface, an identify pattern indicating positions on the  
surface whose arrangement identifies the form layout.*

(Claim 11 incorporates substantially similar subject matter as claimed in claim 9 and is rejected along the same rationale.)

Regarding **dependent claim 12, as amended**, Flickinger in view of Sekendur teaches:

*A computer-readable medium having stored thereon a computer-  
executable instructions for performing the method of:*

*printing, on a surface, a position-coding pattern detectable by an optical  
sensor, wherein the position coding pattern utilizes directions of displacements  
between a plurality of marks and raster point to code different symbol values;*

*printing, on the surface, a form layout indicating at least one entry field for  
receipt of information; and*

*printing, on the surface, an identify pattern indicating positions on the  
surface whose arrangement identifies the form layout.*

(Claim 12 incorporates substantially similar subject matter as claimed in claim 9 and is rejected along the same rationale.)



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Regarding **independent claim 13, as amended**, Flickinger in view of Sekendur teaches:

*A method for generating a form, comprising:*

*on a surface having a position-coding pattern detectable by an optical sensor, wherein the position coding pattern utilizes directions of displacements between a plurality of marks and raster points to code different symbol values, printing a form layout indicating at least one entry field for receipt of information; and*

*printing on the surface an identity pattern indicating positions on the surface whose arrangement identifies the form layout.*

(Claim 13 incorporates substantially similar subject matter as claimed in claim 1 and is rejected along the same rationale.)

Regarding **dependent claim 14**, Flickinger in view of Sekendur teaches:

*The method of claim 13, wherein printing on the surface the form layout comprises printing the form layout at a known location relative to the position-coding pattern.*

(Claim 14 incorporates substantially similar subject matter as claimed in claim 10 and is rejected along the same rationale.)

Regarding **dependent claim 15, as amended**, Flickinger in view of Sekendur teaches:

*A computer-readable medium having stored thereon computer-executable*

*instructions for performing the method of:*

*printing on a surface an identity pattern indicating positions on the surface whose arrangement identifies the form layout, the surface having a position-coding pattern detectable by an optical sensor, wherein the position coding pattern utilizes directions of displacements between a plurality of marks and raster points to code different symbol values, and printing on the surface a form layout indicating at least one entry field for receipt of information.*

(Claim 15 incorporates substantially similar subject matter as claimed in claim 13 and is rejected along the same rationale.)

Regarding **independent claim 16, as amended**, Flickinger in view of Sekendur teaches:

*A method for processing a form, comprising:*

*receiving from an optical sensor position data corresponding to movement of a device containing the optical sensor over a surface having a position-coding pattern detectable by the optical sensor,*

*wherein the position coding pattern utilizes directions of displacements between a plurality of marks and raster points to code different symbol values;*

*determining from the position data a form layout printed on the surface;*

*and*

*determining from the position data an information entry in an entry field defined by the form layout.*

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(Claim 16 incorporates substantially similar subject matter as claimed in claim 1 and is rejected along the same rationale.)

Regarding **dependent claim 17**, Flickinger in view of Sekendur teaches:

*The method of claim 16, further comprising storing the information entry in a database.*

(See, Flickinger, col. 4, lines 3-18, and col. 4, lines 36-48, teaching teaches storing the data.)

Regarding **dependent claim 18**, Flickinger in view of Sekendur teaches:

*The method of claim 16, further comprising:*

*translating the information entry into a non-handwritten format based on a type of information expected to be received in the entry field; and*

*storing the translated information entry in a database.*

(See, Flickinger, col. 4, lines 3-18, and col. 4, lines 36-48, teaching translating the information entry into a non-handwritten format based on a type of information expected to be received in the entry field.)

Regarding **dependent claim 19**, Flickinger in view of Sekendur teaches:

*The method of claim 16, further comprising:*

*translating the information entry into a result of a type chosen from the group consisting of Boolean variable, whole number, real number, and text string;*

*and*

*storing the result in a database.*

(See, Flickinger, col. 4, lines 3-18, and col. 4, lines 36-48, teaching storage of information as a text string.)

Regarding **dependent claim 20**, Flickinger in view of Sekendur teaches:

*The method of claim 16, wherein determining from the position data the form layout printed on the surface comprises:*

*determining a sub-portion of the position data located in a predetermined area of the position-coding pattern;*

*finding a match to the sub-portion in a plurality of known identity patterns representing possible form layouts; and*

*determining the form layout corresponding to the match.*

(See, Flickinger, col. 4, lines 16-64, and col. 4, lines 3-18, teaching determining a sub-portion of a plurality of position data in a form layout in a predetermined area, and finding a match to the sub-portion, and determining the form layout corresponding to the match. Specifically, Flickinger teaches, in one embodiment, to mark boxes located on different areas of the form to identify the form which is then used by the system.)

Regarding **dependent claim 21**, Flickinger in view of Sekendur teaches:

*The method of claim 16, wherein determining from the position data the information entry in the entry field defined by the form layout comprises*

*determining a sub-portion of the position data whose location falls in an area of the position-coding pattern known to be encompassed by the entry field.*

(See, Flickinger, col. 4, lines 16-64, and col. 4, lines 3-18, teaching determining a sub-portion of a plurality of position data in a form layout in a predetermined area, and finding a match to the sub-portion, and determining the form layout corresponding to the match. Specifically, Flickinger teaches, in one embodiment, to mark boxes located on different areas of the form to identify the form which is then used by the system. See also, Flickinger, figure 5, element 206 appearing within the data entry field.)

Regarding **dependent claim 22, as amended**, Flickinger in view of Sekendur teaches:

*A computer-readable medium having stored thereon computer-executable instructions for performing the method of:*

*receiving from an optical sensor position data corresponding to movement of a device containing the optical sensor over a surface having a position-coding pattern detectable by the optical sensor, wherein the position coding pattern utilizes directions of displacements between a plurality of marks and raster points to code different symbol values;*

*determining from the position data a form layout printed on the surface;*  
*and*

*determining from the position data an information entry in an entry field defined by the form layout.*

(Claim 22 incorporates substantially similar subject matter as claimed in claim 16 and is

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rejected along the same rationale.)

Regarding **independent claim 23, as amended**, Flickinger in view of Sekendur teaches:

*A method for electronically collecting information from forms, the method comprising:*

*providing a user with a form, the form containing printed indicia on a foreground thereof prompting the user to associate written information with the printed indicia, wherein the form further includes preprinted coded information in the background thereof, wherein the preprinted coding information utilizes the directions of displacements between a plurality of marks and raster points to code different symbol values;*

*encouraging the user to fill in portions of the form using an implement capable of marking the form, the implement being further capable of detecting the preprinted coded information over which the implement passes and generating a signal in response thereto; and*

*electronically receiving the signal and translating the signal into information reflecting an intention of the user.*

(Claim 23 incorporates substantially similar subject matter as claimed in claim 1 and, in light of the following, is rejected along the same rationale. It is inherent in the construction of a form with the specified functions that the form would be provided to a user who would be “encouraged” to fill in the form.)

Regarding **dependent claim 24**, Flickinger in view of Sekendur teaches:

*The method of claim 23, further including storing in a database the information reflective of the user's intention.*

(Flickinger in view of Sekendur teaches all the limitations of claim 23. In addition, Flickinger teaches storing the data. See, Flickinger, col. 4, line 13.

The differences between claim 24 and claim 23 are only found in the non-functional descriptive material and are not functionally involved in the steps recited. The steps of marking of a form entry field with an optical sensor sensing the location of the mark, encouraging a user to fill in the form, and transferring the user's data to a processor would be the same whether the information stored was "reflective of the user's intentions" or not. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability. See, *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to store data from a filled in form, regardless of the limitation of the user's intentions regarding the data.)

Regarding **dependent claim 25**, Flickinger in view of Sekendur teaches:

*The method of claim 23, wherein the form is printed on a material chosen from the group consisting of paper stock, plastic, and laminate.*

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(See, Sekendur, Abstract, teaching that the invention "might be used for determining the position of a pen/pencil on paper for handwriting data input.")

Regarding **dependent claim 26**, Flickinger in view of Sekendur teaches:

*The method of claim 23, wherein the written information is hand-written.*

(See, Flicking, col. 4, lines 13-15, teaching that the user of the invention "just fills out the form or takes notes on a piece of paper with the board as a support, as one normally does in writing." See also, Sekendur, Abstract, teaching that the invention "might be used for determining the position of a pen/pencil on paper for handwriting data input.")

Regarding **dependent claim 27**, Flickinger in view of Sekendur teaches:

*The method of claim 23, wherein the implement is in the form of a pen having an optical code reader therein.*

(See, Sekendur, figure 6, and col. 4, line 50 through col. 6, line 35, teaching the pen with an optical code reader therein.)

Regarding **dependent claim 28, as amended**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein each mark is uniquely associated with a raster point.*

(It is noted that pursuant to the Examiner's reading of the term "raster marks" as being a non-limiting non-functional descriptive term inherent in the regular appearance of the marks, the raster point are inherently uniquely associated with the marks.)



Regarding **dependent claim 29, as amended**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the raster points are derived from the marks.  
(It is noted that pursuant to the Examiner's reading of the term "raster marks" as being a non-limiting non-functional descriptive term inherent in the regular appearance of the marks, the raster point are inherently derived from the marks.)*

Regarding **dependent claim 30**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein a single mark contributes to at least two different positions.*

(See, Sekendur, figure 4a, teaching a single mark, the square in the raster, contributing both the X and Y coordinates. See also, Sekendur figures 1 and 2, and col. 4, lines 28-41, teaching that a single dot may contribute to three positions.)

Regarding **dependent claim 31, as amended**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the raster points are undetectable by the optical sensor.*

(See, Sekendur, claim 9, teaching a selective decoder means, which can select which of a plurality of coding means to select.)

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Regarding **dependent claim 32**, Flickinger in view of Sekendur teaches:

*The form of claim 1, wherein the plurality of marks comprises dots.*

(See, Sekendur, figures 1-3, teaching marks comprising dots.)

Regarding **dependent claim 33**, Flickinger in view of Sekendur teaches:

*The method of claim 16, wherein the plurality of marks comprises dots.*

(Claim 33 incorporates substantially similar subject matter as claimed in claim 32 and is rejected along the same rationale.)

Regarding **dependent claim 34**, Flickinger in view of Sekendur teaches:

*The method of claim 23, wherein the plurality of marks comprises dots.*

(Claim 34 incorporates substantially similar subject matter as claimed in claim 32 and is rejected along the same rationale.)

Regarding **dependent claim 35, as amended**, Flickinger in view of Sekendur teaches:

*The form of claim 1 wherein the position coding pattern includes a mark  
present at every raster point.*

(See, Sekendur, figures 1-5, teaching marks in a position coding pattern applied at every raster point.)

Regarding **dependent claim 36, as amended**, Flickinger in view of Sekendur teaches:

*The method of claim 9 wherein the position coding pattern includes a mark*

*present at every raster point.*

(Claim 36 incorporates substantially similar subject matter as claimed in claim 35 and is rejected along the same rationale.)

Regarding **dependent claim 37, as amended**, Flickinger in view of Sekendur teaches:

*The method of claim 13 wherein the position coding pattern includes a mark present at every raster point.*

(Claim 37 incorporates substantially similar subject matter as claimed in claim 35 and is rejected along the same rationale.)

Regarding **dependent claim 38, as amended**, Flickinger in view of Sekendur teaches:

*The method of claim 16 wherein the position coding pattern includes a mark present at every raster point.*

(Claim 38 incorporates substantially similar subject matter as claimed in claim 35 and is rejected along the same rationale.)

Regarding **dependent claim 39, as amended**, Flickinger in view of Sekendur teaches:

*The method of claim 23 wherein the position coding pattern includes a mark present at every raster point.*

(Claim 39 incorporates substantially similar subject matter as claimed in claim 35 and is rejected along the same rationale.)

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12. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

### ***Response to Arguments***

Applicant's arguments filed March 22 and June 9, 2006 have been fully considered, but they are not persuasive.

#### **Regarding rejections of independent claim 1:**

Applicant argues that the prior art reference fail to teach or suggest at least: "a position coding pattern . . . wherein each position is encoded by directions of displacements between a plurality of marks and raster points." See, Amendment, October 30, 2006, pages 16-20.

The Examiner disagrees.

Sekendur teaches a position coding pattern. See, Sekendur, figures 1-5a, and col. 2, line 12 through col. 4, line 59.

As explained in the section above discussing terminology, the "marks" are read as having been intended by the Applicant to be the dots or other indicia printed on the surface for position code patterning. Sekendur clearly teaches such dots, marks and raster points in figures 1-5a, and col. 2, line 12 through col. 4, line 59.

Sekendur teaches position encoded by directions of displacements between a plurality of marks and raster points. See, Sekendur, figures 1-5a, and col. 2, line 12 through col. 4, line 59, particularly, col. 4, lines 15-49. For example, Sekendur clearly teaches displacement between a plurality of marks as shown in figures 1a, 2, 4a, and 5a, in which the marks are displaced within the elements indicating position.

The "raster" is taught in Sekendur as the "center circle 4," which is consistent with the definition of a visible or virtual reference point for the displaced "marks." See, Sekendur, figure 1, and col. 4, lines 30-32. The "marks" are taught in Sekendur as the "slices 7" which are oriented around the "center circle 4" and which, by their displaced position relative to the "center circle 4" indicate the location of the indicator on the page. See, Sekendur, figure 1, and col. 4, lines 28-41.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael K. Botts whose telephone number is 571-272-5533. The examiner can normally be reached on Monday through Friday 8:00-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKB/mkb

  
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